

Amendment to the Claims:

This listing of claims 1-5 will replace all prior versions, and listing of claims in the application.

1. (Currently Amended) A dual-stack optical data storage medium for at least read out using a focused radiation beam with a wavelength λ between 400 nm and 410 nm and an Numerical Aperture (NA) between 0.84 and 0.86, entering through an entrance face of the medium during read out, comprising:

a substrate with present on a side thereof:

a first stack of layers named L0 comprising a first information layer,

a second stack of layers named L1, comprising a second information layer, L1 being present at a position closest to the entrance face and L0 more remote from the entrance face than L1,

a radiation beam transparent spacer layer between L0 and L1,

a radiation beam transparent cover layer between the entrance face and L1

a transmission stack named TS0 with a thickness d_{TS0} and an effective refractive index n_{TS0} containing all layers between L0 and the entrance face,

a transmission stack named TS1 with a thickness d_{TS1} and an effective refractive index n_{TS1} containing all layers between L1 and the entrance face,

~~characterized in that~~ wherein the spacer layer has a thickness selected from the range 20-30 μm , the thickness d_{TS0} in dependence on the refractive index n_{TS0} ~~is within the upper shaded area in FIG. 1~~ and the thickness d_{TS1} in dependence on the refractive index n_{TS0} ~~is within the lower shaded area in FIG. 1.~~

2. (Original) An optical data storage medium according to claim 1, wherein the maximum deviations of d_{TS0} and d_{TS1} from respectively the average values of d_{TS0} and d_{TS1} between a radius of 23 mm and 24 mm of the medium do not exceed $\pm 0.2 \mu\text{m}$ measured over the whole area of the medium.
3. (Original) An optical data storage medium according to claim 1, wherein $n_{\text{sub.TS0}}$ and $n_{\text{sub.TS1}}$ both have a value of 1.6 and the following conditions are fulfilled: $95 \mu\text{m} \leq d_{\text{sub.TS0}} \leq 105 \mu\text{m}$ and $70 \mu\text{m} \leq d_{\text{sub.TS1}} \leq 80 \mu\text{m}$.
4. (Original) An optical data storage medium according to claim 1, wherein the spacer layer thickness is 25 μm or substantially close to 25 μm and the cover layer thickness is 75 μm or substantially close to 75 μm .
5. (Original) Use of an optical data storage medium as claimed in claim 1 for reliable data read out from both the first information layer and the second information layer.